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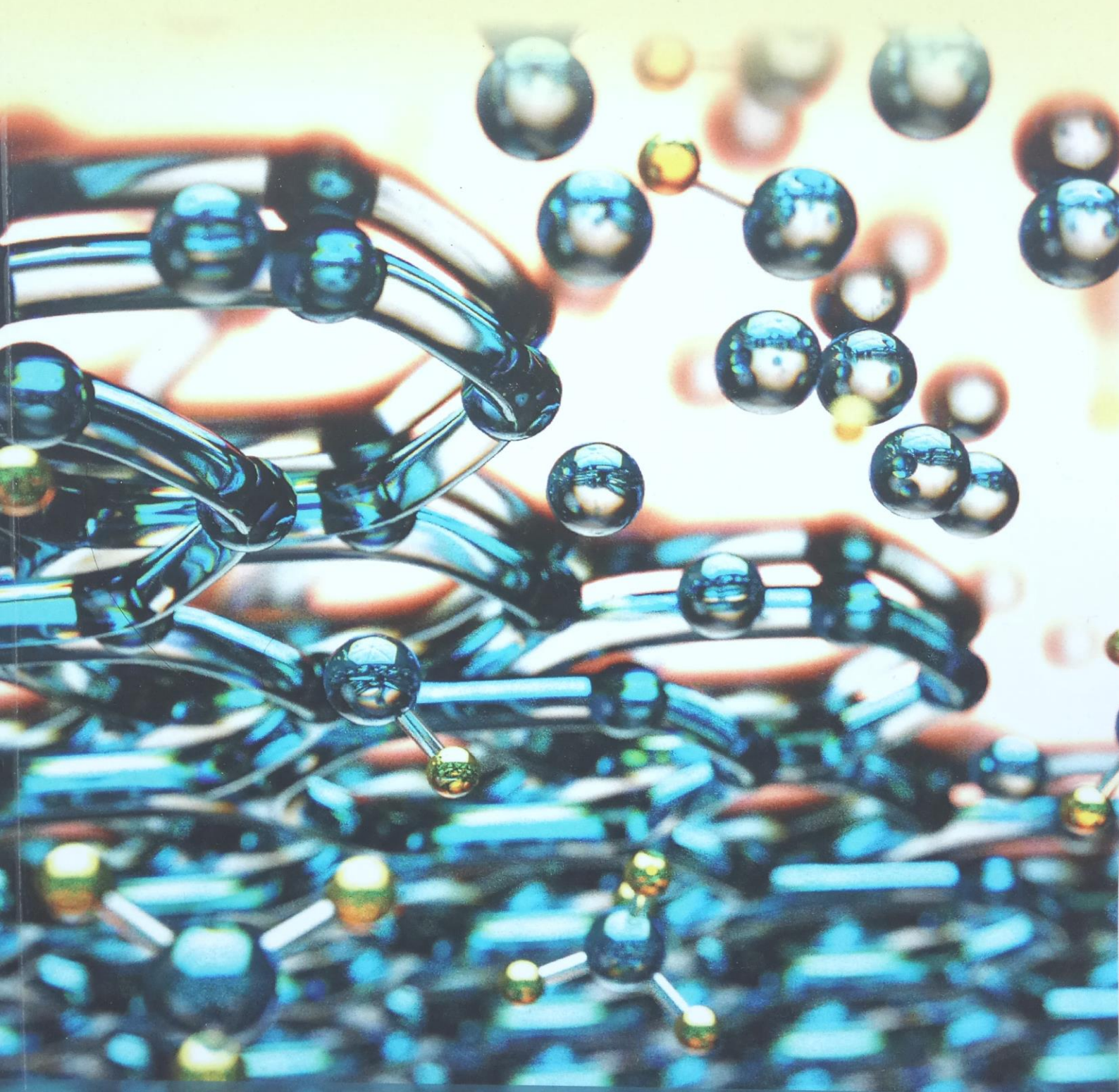
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**Carbon Nanotube reinforced thermoplastic nanocomposites with superior production economics for oil/ gas applications****Fawad Inam**

Northumbria University, UK

Carbon nanotubes (CNTs) is one of the popular members in fullerene family that offer unique combinations of superlative chemical and physical properties. This presentation will look into how a simple chemical manipulation at nano-scale of a superlative chicken wire structure of CNTs can be exploited for improved production economics in the development of subsea engineering products used for oil/ gas applications. Substituting advanced polymers and micro-composites with nanofilled reinforced polymer composites would not just bring major economical benefits but would also significantly uplift the mechanical performance of the products. However, there are several key challenges prior to this forthcoming substitution. The research team at Northumbria University, UK are in collaboration with the leading subsea product producers and Universities of Europe and USA. Highlights of this collaboration will be summarized during the presentation as well.

**Keywords:** Carbon Nanotubes, Fullerene, Polymers**Biography:**

Dr. Inam's research and enterprise expertise is primarily focused around improving the performance and functionalities of engineering products using nano-influenced smart materials. He has conducted several consultancies and widely published research of great commercial and scientific significance in leading peer-reviewed journal for all types of engineering materials (metals, ceramics, polymers and composites). His most recent efforts have been devoted towards the development of advanced materials (ceramics, polymers, metals and composites) and nanomaterials (including fullerenes and graphene) for aerospace, petroleum, industrial, defence and bio sectors.

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